	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L3	45	polysaccharide same polypeptide same non$1covalent	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/09/08 17:09			0
2	BRS	L4	8	polysaccharide same polypeptide same non$1covalent same complex	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/09/08 17:20			0
3	BRS	L5	0	4 same (dimer or oligomer)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/09/08 17:21			0
4	BRS	L6	67098	disulfide or dimethylene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/09/08 17:22			0
5	BRS	L7	2	4 same 6	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/09/08 17:22			0
6	BRS	L8	4321	immunolo$5 same disorder	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/09/08 17:23			0
7	BRS	L9	0	4 same 8	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/09/08 17:23			0

=> d his

(FILE 'HOME' ENTERED AT 17:25:53 ON 08 SEP 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
17:26:17 ON 08 SEP 2002

L1 291 S POLYSACCHARIDE (P) POLYPEPTIDE (P) COMPLEX
L2 0 S L1 (P) NON-COVALENT
L3 0 S L1 (P) NONCOVALENT
L4 4254 S IMMUNOLOG? (A) DISORDER
L5 0 S L1 (P) L4
L6 14222 S MANNOSE (P) GLUCOSE (P) GALACTOSE
L7 1105 S L6 (P) PHOSPHATE
L8 10 S L1 (P) L7
L9 2 DUPLICATE REMOVE L8 (8 DUPLICATES REMOVED)
L10 2 S L1 (P) (DIMER OR OLIGOMER)
L11 2 DUPLICATE REMOVE L10 (0 DUPLICATES REMOVED)
L12 11 S (DISULFIDE OR DIMETHYLENE) (P) L1
L13 4 DUPLICATE REMOVE L12 (7 DUPLICATES REMOVED)

=> log y

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FILE 'HOME' ENTERED AT 17:25:53 ON 08 SEP 2002

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'MEDLINE' ENTERED AT 17:26:17 ON 08 SEP 2002

FILE 'CAPLUS' ENTERED AT 17:26:17 ON 08 SEP 2002
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FILE 'SCISEARCH' ENTERED AT 17:26:17 ON 08 SEP 2002
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FILE 'AGRICOLA' ENTERED AT 17:26:17 ON 08 SEP 2002

=> s polysaccharide (p) polypeptide (p) complex
L1          291 POLYSACCHARIDE (P) POLYPEPTIDE (P) COMPLEX

=> s l1 (p) non-covalent
L2            0 L1 (P) NON-COVALENT

=> s l1 (p) noncovalent
L3            0 L1 (P) NONCOVALENT

=> s immunolog? (A) disorder
L4         4254 IMMUNOLOG? (A) DISORDER

=> s l1 (p) l4
L5            0 L1 (P) L4

=> s mannose (p) glucose (p) galactose
L6        14222 MANNOSE (P) GLUCOSE (P) GALACTOSE

=> s l6 (p) phosphate
L7         1105 L6 (P) PHOSPHATE

=> s l1 (p) l7
L8           10 L1 (P) L7

=> duplicate remove l8
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L8
L9             2 DUPLICATE REMOVE L8 (8 DUPLICATES REMOVED)

=> d l9 1-2 ibib abs

L9   ANSWER 1 OF 2     MEDLINE                              DUPLICATE 1
ACCESSION NUMBER:    92192014     MEDLINE
DOCUMENT NUMBER:     92192014    PubMed ID: 1547784
TITLE:               Human serum amyloid P is a multispecific adhesive protein
                     whose ligands include 6-phosphorylated mannose and the
                     3-sulphated saccharides galactose, N-acetylgalactosamine
                     and glucuronic acid.
AUTHOR:              Loveless R W; Floyd-O'Sullivan G; Raynes J G; Yuen C T;
                     Feizi T
CORPORATE SOURCE:    Glycoconjugates Section, MRC Clinical Research Centre,
                     Harrow, Middlesex, UK.
SOURCE:              EMBO JOURNAL, (1992 Mar) 11 (3) 813-9.
                     Journal code: 8208664. ISSN: 0261-4189.
```

PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199204
ENTRY DATE: Entered STN: 19920509
Last Updated on STN: 20000303
Entered Medline: 19920421

AB Carbohydrate recognition by amyloid P component from human serum has been investigated by binding experiments using several glycosaminoglycans, ***polysaccharides*** and a series of structurally defined neoglycolipids and natural glycolipids. Two novel classes of carbohydrate ligands have been identified. The first is 6-phosphorylated ***mannose*** as found on lysosomal hydrolases, and the second is the 3-sulphated saccharides ***galactose*** , N-acetyl-galactosamine and glucuronic acid as found on sulphatide and other acidic glycolipids that occur in neural or kidney tissues or on subpopulations of lymphocytes. Binding to ***mannose*** -6- ***phosphate*** containing molecules and inhibition of binding by free ***mannose*** -6- ***phosphate*** and fructose-1- ***phosphate*** are features shared with ***mannose*** -6- ***phosphate*** receptors involved in trafficking of lysosomal enzymes. However, only amyloid P binding is inhibited by ***galactose*** -6- ***phosphate*** , ***mannose*** -1- ***phosphate*** and ***glucose*** -6- ***phosphate*** . These findings strengthen the possibility that amyloid P protein has a central role in amyloidogenic processes: first in formation of focal concentrations of lysosomal enzymes including proteases that generate fibril-forming peptides from amyloidogenic proteins, and second in formation of multicomponent ***complexes*** that include sulphoglycolipids as well as glycosaminoglycans. The evidence that binding to all of the acidic ligands involves the same ***polypeptide*** domain on amyloid P protein, and inhibition data using diffusible, phosphorylated monosaccharides, is potentially important leads to novel drug designs aimed at preventing or even reversing amyloid deposition processes without interference with essential lysosomal trafficking pathways.

L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
ACCESSION NUMBER: 1991:651768 CAPLUS
DOCUMENT NUMBER: 115:251768
TITLE: Cell wall and sheath constituents of the cyanobacterium Gloeobacter violaceus
AUTHOR(S): Schneider, Sabine; Juergens, Uwe J.
CORPORATE SOURCE: Inst. Biol. II, Mikrobiol., Albert-Ludwigs-Univ., Freiburg/Br., W-7800, Fed. Rep. Ger.
SOURCE: Arch. Microbiol. (1991), 156(4), 312-18
CODEN: AMICCW; ISSN: 0302-8933
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Sheaths isolated from G. violaceus were found to be composed of a major ***polysaccharide*** moiety (***glucose*** , ***galactose*** , rhamnose, ***mannose*** , arabinose), a protein moiety, and neg. charged components (glucuronic acids, ***phosphate*** , sulfate). Outer membrane ***polypeptide*** patterns were dominated by two major peptidoglycan-assocd. proteins (Mr 62,000 and 53,000). Lipopolysaccharide constituents were glucosamine, 3-hydroxy fatty acids (3-OH-14:0, anteiso-3-OH-15:0, 3-OH-16:0, 3-OH-18:0), carbohydrates, and ***phosphate*** . A1.gamma.-type peptidoglycan and non-peptidoglycan components (mannosamine, ***glucose*** , ***mannose*** , and glucosamine) indicated the presence of a peptidoglycanpolysaccharide ***complex*** in the cell walls of G. violaceus.

=> d his

(FILE 'HOME' ENTERED AT 17:25:53 ON 08 SEP 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 17:26:17 ON 08 SEP 2002
L1 291 S POLYSACCHARIDE (P) POLYPEPTIDE (P) COMPLEX
L2 0 S L1 (P) NON-COVALENT
L3 0 S L1 (P) NONCOVALENT

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L4          4254 S IMMUNOLOG? (A[redacted]DISORDER
L5             0 S L1 (P) L4
L6         14222 S MANNOSE (P) GLUCOSE (P) GALACTOSE
L7          1105 S L6 (P) PHOSPHATE
L8            10 S L1 (P) L7
L9             2 DUPLICATE REMOVE L8 (8 DUPLICATES REMOVED)

=> s l1 (p) (dimer or oligomer)
L10            2 L1 (P) (DIMER OR OLIGOMER)

=> duplicate remove l10
DUPLICATE PREFERENCE IS 'CAPLUS, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L10
L11            2 DUPLICATE REMOVE L10 (0 DUPLICATES REMOVED)

=> d l11 1-2 ibib abs

L11  ANSWER 1 OF 2  SCISEARCH  COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER:     93:325363  SCISEARCH
THE GENUINE ARTICLE: LC440
TITLE:                POLY(HYDROXYALKANOATES) - A 5TH CLASS OF PHYSIOLOGICALLY
                      IMPORTANT ORGANIC BIOPOLYMERS
AUTHOR:               MULLER H M; SEEBACH D (Reprint)
CORPORATE SOURCE:     SWISS FED INST TECHNOL, ORGAN CHEM LAB, UNIV STR 16,
                      CH-8092 ZURICH, SWITZERLAND
COUNTRY OF AUTHOR:    SWITZERLAND
SOURCE:               ANGEWANDTE CHEMIE-INTERNATIONAL EDITION IN ENGLISH, (APR
                      1993) Vol. 32, No. 4, pp. 477-502.
                      ISSN: 0570-0833.
DOCUMENT TYPE:        General Review; Journal
FILE SEGMENT:         PHYS; LIFE
LANGUAGE:             ENGLISH
REFERENCE COUNT:      345
                     *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*
AB       Along with polyisoprenoids,   ***polypeptides***  ,
        ***polysaccharides***  , and polynucleotides, Nature contains a further
      group of biopolymers, the poly(hydroxyalkanoates). The commonest member of
      this group, poly[(R)-3-hydroxybutyrate] P(3-HB), had been identified by
      Lemoigne as early as the 1920s, as a storage substance in the
      microorganism Bacillus megaterium made up of more than 12 000 (3-HB)
      units. However, the widespread distribution and significance of these
      biopolymers has only become clear recently. The work of Reusch, in
      particular, has shown that low molecular weight P(3-HB) (100-200 3-HB
      units) occurs in the cell membranes of prokaryotic and eukaryotic
      organisms. The function of P(3-HB) in the latter sources is largely
      unknown; it has been proposed that a   ***complex***   of P(3-HB) and
      calcium polyphosphate acts as an ion channel through the membrane. Indeed,
      it has even been speculated that P(3-HB) plays a role in transport of DNA
      through the cell wall. In the present article, the following subjects will
      be discussed: metabolism of P(3-HB) and analogous polyesters in the
      synthesis and degradation of storage materials; P(3-HB) as a starting
      material for chiral synthetic building blocks; synthesis of cyclic
        ***oligomers***   (oligolides) of up to ten 3-HB units, and their crystal
      structure; high molecular weight bio-copolymers of hydroxybutyrate and
      hydroxyvalerate (BIOPOL) as biologically degradable plastics;
      nonbiological production of polyhydroxyalkanoates from 3-hydroxy
      carboxylic acids and the corresponding beta-lactones; specific synthesis
      of linear   ***oligomers***   with a narrow molecular weight distribution,
      consisting of about 100 (R)-3-hydroxybutyrate units, by using an
      exponential coupling procedure; structure of the polyesters, and a
      comparison with other polymers; the experimental results which led to the
      postulation of a P(3-HB) ion channel through the cell wall; modeling of
      P(3-HB) helices of various diameters, by using the parameters obtained
      from the crystal structures of oligolides; formation of a crown ester
        ***complex***   and ion transport experiments with the triolide of 3-HB.
      The article describes one example of the contributions that synthetic
      organic chemists can make to important biological problems in an
      interdisciplinary framework.

L11  ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:        1980:634971  CAPLUS
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DOCUMENT NUMBER: 93:234[illegible]1
TITLE: Charac[illegible]rization of a mini ColE1 clonin[illegible]vector
AUTHOR(S): Avni, Hanna; Markovitz, Alvin
CORPORATE SOURCE: Dep. Microbiol., Univ. Chicago, Chicago, IL, 60637, USA
SOURCE: Plasmid (1979), 2(2), 225-36
CODEN: PLSMDX; ISSN: 0147-619X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Plasmid pHA105 (formerly pAC105), a mini ColE1 plasmid contg. one restriction endonuclease EcoRI site, was further characterized using restriction endonuclease anal. thereby revealing its relation to ColE1. The ***polypeptides*** specified by plasmid pHA105 in minicells are of low mol. wt. making it a useful plasmid to define cloned ***polypeptides*** larger than 16,000 daltons and its use for that purpose was demonstrated. Plasmid pHA105 was used to clone 2 different sized fragments of DNA contg. the gal operon and to reclone a 2-Mdal fragment of DNA that, when expressed, represses the synthesis of capsular ***polysaccharide*** . The repression of ***polysaccharide*** synthesis was expressed when a plasmid contg. one mol. each of pHA105 and the 2 megadalton fragment was prepd. (pFM100). In contrast, a plasmid contg. 2 copies of pHA 105 and 1 of the 2-megadalton fragment (pHA138) did not repress ***polysaccharide*** synthesis. The expression of a cloned fragment gene may be prevented in certain arrangements of the vector and cloned fragment. Plasmid pHA105 fails to exhibit relaxation after treatment with SDS in contrast to ColE1 treated in the same way. Plasmid pHA105 replicates as a ***dimer*** form while ColE1 usually does not. A hypothesis that a function of a DNA-protein ***complex*** is required for monomeric DNA circle formation is discussed.

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=> d his

     (FILE 'HOME' ENTERED AT 17:25:53 ON 08 SEP 2002)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     17:26:17 ON 08 SEP 2002
L1          291 S POLYSACCHARIDE (P) POLYPEPTIDE (P) COMPLEX
L2            0 S L1 (P) NON-COVALENT
L3            0 S L1 (P) NONCOVALENT
L4         4254 S IMMUNOLOG? (A) DISORDER
L5            0 S L1 (P) L4
L6        14222 S MANNOSE (P) GLUCOSE (P) GALACTOSE
L7         1105 S L6 (P) PHOSPHATE
L8           10 S L1 (P) L7
L9            2 DUPLICATE REMOVE L8 (8 DUPLICATES REMOVED)
L10           2 S L1 (P) (DIMER OR OLIGOMER)
L11           2 DUPLICATE REMOVE L10 (0 DUPLICATES REMOVED)

=> s (disulfide or dimethylene) (p) l1
L12          11 (DISULFIDE OR DIMETHYLENE) (P) L1

=> duplicate remove l12
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L12
L13           4 DUPLICATE REMOVE L12 (7 DUPLICATES REMOVED)

=> d l13 1-4 ibib abs

L13  ANSWER 1 OF 4     MEDLINE                              DUPLICATE 1
ACCESSION NUMBER:   1998207033     MEDLINE
DOCUMENT NUMBER:    98207033   PubMed ID: 9538236
TITLE:              Oxidative refolding of bovine pancreatic RNases A and B
                    promoted by Asn-glycans.
AUTHOR:             Nishimura I; Uchida M; Inohana Y; Setoh K; Daba K;
                    Nishimura S; Yamaguchi H
CORPORATE SOURCE:   Department of Applied Biological Chemistry, College of
                    Agriculture, Osaka Prefecture University, Gakuen-cho 1-1,
                    Sakai, Osaka 593-8231, Japan.
SOURCE:             JOURNAL OF BIOCHEMISTRY, (1998 Mar) 123 (3) 516-20.
                    Journal code: 0376600. ISSN: 0021-924X.
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PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199805
ENTRY DATE: Entered STN: 19980609
Last Updated on STN: 19980609
Entered Medline: 19980526

AB It was previously revealed [Yamaguchi, H. and Uchida, M. (1996) J. Biochem. 120, 474-477] that both intra- and extramolecular high-mannose type Asn-glycans promote the renaturation of reductively denatured bovine pancreatic RNases A and B under oxidation conditions. To characterize the conformational changes of the ***polypeptides*** during the renaturation promoted by the intramolecular Asn-glycans, RNase B was compared with its nonglycosylated form, RNase A, as to the features of the regeneration from their reductively denatured species under Cu2+-catalyzed oxidation conditions. The refolding intermediates of RNase B, as compared with those of RNase A, seemed to contain much less impaired ***disulfide*** linkages. In agreement with this finding, the proper refolding of RNase B was much faster than that of RNase A, as revealed by the intrinsic fluorescence and 1-anilino-8-naphthalenesulfonate binding of the refolding intermediates. Such a promoting effect was also observed for extramolecular Asn-glycans of the ***complex*** as well as of the high-mannose type. In contrast, common mono-, oligo-, and ***polysaccharides*** , but not yeast mannan, exhibited much lower stimulatory effects on the oxidative refolding of RNase A.

L13 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2
ACCESSION NUMBER: 1996:481699 BIOSIS
DOCUMENT NUMBER: PREV199699196955
TITLE: Scale-associated glycoproteins of Scherffelia dubia (Chlorophyta) form high-molecular-weight complexes between the scale layers and the flagellar membrane.
AUTHOR(S): Becker, Burkhard (1); Perasso, Lara; Kammann, Andreas; Salzburg, Markus; Melkonian, Michael
CORPORATE SOURCE: (1) Botanisches Inst., Lehrstuhl I, Univ. Koeln, Gyrhofstrasse 15, D-50931 Koeln Germany
SOURCE: Planta (Heidelberg), (1996) Vol. 199, No. 4, pp. 503-510. ISSN: 0032-0935.
DOCUMENT TYPE: Article
LANGUAGE: English

AB Flagellar scales were isolated from the flagellate green alga Scherffelia dubia. The flagellar scales consist mainly of acidic ***polysaccharides*** (70%) and glycoproteins (10%), and monosaccharide analyses show that the scales contain high amounts of unusual 2-keto-sugar acids. Approximately, 72 mol % of total carbohydrate is 3-deoxy-manno-2-octulosonic acid, 3-deoxy-5-O-methyl-manno-2-octulosonic acid and 3-deoxy-lyxo-2-heptulosaric acid. Sodium dodecyl sulfate-polyacrylamide gel electrophoresis showed the presence of at least 18 different scale-associated proteins (SAPs), ranging in apparent molecular mass from 77 kDa to over 300 kDa. Lectin blot analyses performed in combination with glycosidase treatment, showed that SAPs contained N-glycans of the high-mannose type and the hybrid type, as well as a ***complex*** type that was not immunologically related to higher-plant ***complex*** glycans. Most of the SAPs were present in two or possibly three high-molecular-weight ***complexes*** . In these ***complexes*** , individual ***polypeptides*** are cross-linked by ***disulfide*** bridges. A polyclonal antibody was raised against a SAP of 126 kDa (SAP126), a glycoprotein present in a high-molecular-weight ***complex*** . The SAP126 antibody was used to localize the protein between scale layer and flagellar membrane. We suggest that these high-molecular-weight ***complexes*** link scales to the flagellar membrane.

L13 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
ACCESSION NUMBER: 1982:176398 CAPLUS
DOCUMENT NUMBER: 96:176398
TITLE: Isolation and characterization of C-reactive protein and serum amyloid P component in the rat
AUTHOR(S): De Beer, F. C.; Baltz, Marilyn L.; Munn, E. A.; Feinstein, A.; Taylor, J.; Bruton, C.; Clamp, J. R.; Pepys, M. B.

CORPORATE SOURCE: Dep. M[illegible]., R. Postgrad. Med. Sch., Lond[illegible], W12 0HS, UK
SOURCE: Immunology (1982), 45(1), 55-70
CODEN: IMMUAM; ISSN: 0019-2805
DOCUMENT TYPE: Journal
LANGUAGE: English

AB C-reactive protein (CRP) and serum amyloid P component (SAP) were identified in rat blood serum and isolated by affinity chromatog. Rat CRP closely resembled human CRP in its amino acid compn., in having 5 subunits/mol., and in its electron microscopic appearance as a pentameric annular disk. However, in contrast to other CRPs, rat CRP is apparently a glycoprotein bearing a single ***complex*** oligosaccharide on each ***polypeptide*** subunit; also, 1 pair of its subunits/mol. is linked by interchain ***disulfide*** bridges. Serum CRP concn. in normal healthy lab. rats and specific pathogen-free rats was 300-600 .mu.g/mL; following casein or croton oil injection, serum CRP levels rose to a max. of .apprx.900 .mu.g/mL. Rat CRP bound to pneumococcal C-***polysaccharide*** (CPS), but did not ppt. with CPS solns., agglutinate CPS-coated sheep erythrocytes, or initiate complement activation. Rat SAP was a glycoprotein composed of a single pentameric disk; the normal serum level was 20-50 .mu.g/mL and did not behave as an acute phase reactant.

L13 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1981:214959 BIOSIS
DOCUMENT NUMBER: BA71:84951
TITLE: CHARACTERIZATION OF THE GLYCOSAMINO GLYCAN COMPONENT OF THE RENAL GLOMERULAR BASEMENT MEMBRANE AND ITS RELATIONSHIP TO THE PEPTIDE PORTION.
AUTHOR(S): PARTHASARATHY N; SPIRO R G
CORPORATE SOURCE: ELLIOTT P. JOSLIN RES. LAB., ONE JOSLIN PL., BOSTON, MASS. 02215.
SOURCE: J BIOL CHEM, (1981) 256 (1), 507-513.
CODEN: JBCHA3. ISSN: 0021-9258.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB Peptide-linked glycosaminoglycan was isolated from proteolytic digests of sonically prepared bovine glomerular basement membranes. Approximately 85% of the hexuronic acid-containing material of the basement membrane could be solubilized by collagenase and after further treatment with pronase was primarily recovered in a high MW Bio-Gel A-0.5m fraction. Upon chromatography on DEAE-cellulose, a single hexuronic acid-containing component was obtained which, on the basis of its composition and electrophoretic migration, appeared to consist of heparan sulfate-like chains linked to a peptide portion which constituted 10% of its weight. Glucuronic acid was the predominant uronic acid (glucuronic acid/iduronic acid = 9:1) and .apprx. 0.9 sulfate groups were present per repeating disaccharide unit, of which 0.3 were in the N-sulfated form. Calculations based on xylose content indicated that the average MW of the heparan sulfate chains was 13,600; sufficient serine was present (xylose/serine = 0.72) to account for xylosylserine attachments of the ***polysaccharide*** chains. The occurrence of hydroxyproline and hydroxylysine in this ***complex*** indicated that a collagenlike segment of the basement membrane was present. This collagenous ***polypeptide*** appeared to be linked by ***disulfide*** bonds to the peptide which contained the ***polysaccharide*** attachment sites, since it was cleaved from the latter by performic acid oxidation. The peptide associated with the glycosaminoglycan after scission of ***disulfide*** linkages contained only a limited number of amino acids, among which glycine and serine predominated. Minimum MW calculations based on the presence of a single cystine residue in the ***disulfide*** -bonded glycosaminoglycan-peptide indicated that it contained at least 4 ***polysaccharide*** chains attached to the peptide segment and this was consistent with its behavior during gel filtration in 2 M KCl. The collagenase-insoluble hexuronic acid-containing material of the basement membrane was brought into solution by pronase digestion and yielded a peptidelinked glycosaminoglycan which was similar in composition and electrophoretic mobility but contained a more extensively trimmed peptide moiety.

=> d his

(FILE 'HOME' ENTERED AT 17:25:53 ON 08 SEP 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 17:26:17 ON 08 SEP 2002

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L2            0 S L1 (P) NON-COVALENT
L3            0 S L1 (P) NONCOVALENT
L4         4254 S IMMUNOLOG? (A) DISORDER
L5            0 S L1 (P) L4
L6        14222 S MANNOSE (P) GLUCOSE (P) GALACTOSE
L7         1105 S L6 (P) PHOSPHATE
L8           10 S L1 (P) L7
L9            2 DUPLICATE REMOVE L8 (8 DUPLICATES REMOVED)
L10           2 S L1 (P) (DIMER OR OLIGOMER)
L11           2 DUPLICATE REMOVE L10 (0 DUPLICATES REMOVED)
L12          11 S (DISULFIDE OR DIMETHYLENE) (P) L1
L13           4 DUPLICATE REMOVE L12 (7 DUPLICATES REMOVED)
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=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	50.99	51.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.86	-1.86

STN INTERNATIONAL LOGOFF AT 17:33:37 ON 08 SEP 2002